

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-19 and 21-31 and amend the claims as follows:

1-19. (Cancelled)

20. (Currently Amended) [[The]] A system of claim 11 comprising:
a process chamber;
a gas delivery system adapted to deliver a precursor from a vessel containing the
precursor to the process chamber via a process gas produced by flowing a first carrier gas
into the vessel and combining the first carrier gas with a second carrier gas flowing through
a bypass around the vessel;
a precursor monitoring apparatus disposed between the process chamber and the
vessel, wherein the precursor monitoring apparatus has a gas analyzer to generate a
signal indicative of a concentration of the precursor in the process gas or the signal is
indicative of the flow rate of the precursor, wherein the gas analyzer comprises an
ultrasonic transducer and a mass flow meter; and
an integral controller to receive the signal.

21-41. (Cancelled)